

### **REMARKS**

Favorable reconsideration is respectfully requested in view of the foregoing amendments and the following remarks.

#### **I. CLAIM STATUS AND AMENDMENTS**

Claims 1-14 were pending in this application when last examined.

Claims 1-7 were examined on the merits and stand rejected.

Claims 8-14 were withdrawn as non-elected subject matter.

Claim 1 is amended to clarify the claimed invention.

Claim 6 is amended to recite "wherein the single flexible site of the second linker sequence is a single di-glycine motif". Support for this amendment can be found on page 12, lines 20-21 of the specification as filed.

No new matter has been added.

#### **II. FOREIGN PRIORITY**

The Examiner is respectfully requested to fully acknowledge the claim for foreign priority by checking boxes 12(a)(1, 2 or 3) on the coversheet of the next response.

#### **III. INDEFINITENESS REJECTION**

On page 3 of the Office Action, claims 1-7 were rejected under 35 U.S.C. § 112, second paragraph, as indefinite. Claim 1 has been amended to clarify the claimed invention. Therefore, this rejection is overcome.

#### **IV. WRITTEN DESCRIPTION REJECTION**

On page 3, claims 1-7 were rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. In particular, the Office's position is that claim 1 introduces new matter because it refers to a third rigid linker sequence with a particular position that is not taught in the original specification or claims. Applicants respectfully traverse this rejection as applied to the amended claims.

Applicants note that the specification and drawings clearly disclose three rigid linker sequences in the probe of claim 1.

Specifically, support for such third rigid linker sequence can be found in Figure 1, which describes:

polypeptide 2 which can specifically bind lipid second messenger 6;

first chromophore 31 linked to one of polypeptide 6 through rigid linker sequence 41;

second chromophore 32 linked to another end of polypeptide 2 through second rigid linker sequence 42, wherein second chromophore 32 has a different fluorescence wavelength from first chromophore 31, and second rigid linker sequence 42 is rigid except for single flexible site 43 acting as a hinge; and

membrane localization sequence 5 is linked to second chromophore 32 through third rigid linker sequence 44.

Further support for the third rigid linker can also be found on page 8, lines 11-21, of the specification where Symbols 41, 42 and 44 are described as “rigid linker sequence.”

Finally, it is noted that in the disclosure of the invention on page 3, lines 10-15, a probe is described that comprises a polypeptide with two chromophores linked to each end of the polypeptide through a rigid linker sequence. As shown in Figure 1, wherein (2) is the polypeptide, (41) and (42) are the first two rigid linker sequences. Further, page 3 indicates that a membrane localization sequence is linked to one of the chromophores through a rigid linker sequence. Thus, this is the third rigid linker sequence as indicated in claim 1.

Therefore, Applicants respectfully note that the third rigid linker of claim 1 is not new matter.

Thus, for the above-noted reasons, this rejection is untenable and should be withdrawn.


**CONCLUSION**

In view of the foregoing amendments and remarks, it is respectfully submitted that the present application is in condition for allowance and early notice to that effect is hereby requested.

If the Examiner has any comments or proposals for expediting prosecution, please contact the undersigned attorney at the telephone number below.

Respectfully submitted,

Yoshio UMEZAWA et al.

By:   
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William R. Schmidt, II  
Registration No. 58,327  
Attorney for Applicants

WRS/lc  
Washington, D.C. 20006-1021  
Telephone (202) 721-8200  
Facsimile (202) 721-8250  
October 29, 2008